IN THE CLAIMS

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19. (Previously amended)A method of forming a silicon oxynitride film including:

placing a substrate in a deposition chamber and obtaining a desired process temperature and a desired process pressure;

flowing an oxidation source gas into said deposition chamber at a first desired flow rate for a first predetermined amount of time after said desired process temperature and said desired process pressure are obtained;

diverting a silicon source gas away from said deposition chamber, said diverting having said silicon source gas flow at a second desired flow rate and said diverting occurring before forming said silicon oxynitride film;

stopping said diverting and flowing said silicon source gas at said second desired flow rate into said deposition chamber;

decomposing said silicon source gas and said oxidation source gas in said deposition chamber using a thermal energy source;

forming said silicon oxynitride film above said substrate wherein said desired process pressure is between of 50 to 350 Torr, wherein said desired process temperature is between 400°C to 800°C, and wherein a flow ratio for said silicon source gas and said oxidation source gas is between 1:50 to 1:10000;

wherein said silicon source gas is mixed with a nitridation source gas;

terminating said silicon source gas into said deposition chamber while maintaining said flowing of said oxidation source gas in said deposition chamber for a second predetermined amount of time; and

purging said deposition chamber with a cleaning gas.

20. (Previously amended) A method as in claim 19 wherein said silicon source gas is selected from the group consisting of silane, disilane, methylsilane, and halogenated silanes.

21. (Original) A method as in claim 19 further including mixing said silicon source gas with said oxidation source gas prior to said forming of said silicon oxynitride film.

22. (Previously amended) A method as in claim 19 wherein said oxidation source gas is selected from the group consisting of nitrous oxide, ozone, and TEOS.

23. (Previously amended) A method as in claim 19 wherein said nitrogen source gas is selected from the group consisting of an ammonium source gas, ammonia, and hydrazine.

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25. (Previously amended) A process of forming an oxide film including:

depositing a substrate in a deposition chamber, said deposition chamber designed such that thermal low-pressure chemical vapor deposition process is utilized to form said oxide film on said substrate

said deposition chamber further includes a water passage to create a cold wall deposition chamber, a resistively heated heater pocket to heat up said substrate wherein said substrate is horizontally placed on said heater pocket and a gas distribution point for injecting reactant gases into said deposition chamber;

flowing a silicon source gas and an oxidation source gas into said distribution point wherein said distribution point is located above said resistively heated heater pocket;

decomposing said silicon source gas and said oxidation source gas using a thermal energy source from said deposition chamber; and

forming said oxide film on said substrate.

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28. (Previously presented) A method as in claim 25 wherein said silicon source gas is selected from the group consisting of silane, disilane, methylsilane, and halogenated silanes.

29. (Previously presented) A method as in claim 25 further including mixing said silicon source gas with said oxidation source gas prior to said forming of said silicon oxynitride film.

30. (Previously presented) A method as in claim 25 wherein said oxidation source gas is selected from the group consisting of nitrous oxide, ozone, and TEOS.

31. (Previously presented) A method as in claim 25 wherein said nitrogen source gas is selected from the group consisting of an ammonium source gas, ammonia, and hydrazine.